A Dynamic Analysis of the Integration of the Korean Stock Market with Its Trading Partners

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Abstract

This paper investigates whether foreign trade matters for the stock markets integration by segmenting Korean trade partners into three groups - USA, China, and Japan - based on bilateral trade relations. We further explore the time-varying correlations of pairwise stock market returns by employing DCC-GARCH models. The study uses daily stock price index data from January 2nd, 2006 to December 31st, 2018. Empirical findings show the presence of a long-run relationship between Korea and its major trading partners in the pre-crisis and post-crisis (includes crisis-period). Results from DCC-GARCH evidence that correlations are time-varying and increase significantly during the crisis period and revert close to their initial levels after the crisis. Further, we also find that the time-varying correlations of Korea with the USA and Japan are more volatile. Our findings confirm that foreign trade intensity matters for the stock market integration. The absence of a stable long-run relationship may provide an incentive for investors to include these markets into their portfolio selection process to exploit potential diversification benefits.

Keywords: Trade linkages; Stock market integration; Global financial crisis; DCC-GARCH models